

DOCUMENT RESUME

ED 031 898

EF 003 137

Seminar to Discuss the Report on Carpet Function and Selection for the Dade County Board of Public Instruction.

Pancoast, Ferendino, Grafton and Skeels, Architects, Miami, Fla.

Report No-SCR-9

Pub Date 5 Jun 64

Note-16p.

EDRS Price MF-\$0.25 HC-\$0.90

Descriptors-Acoustical Environment, \*Carpeting, \*Flooring, Maintenance, \*School Environment, \*Specifications, Student Behavior

The efficiency, cost and selection of carpet in schools were discussed in some detail, including flammability, maintenance, type and density of fiber, underpad, and methods of installation. The following conclusions were stated--(1) the use of carpet substantially improves the educational environment, and (2) the total cost of carpet, including maintenance, is no more than that of resilient floor finishes. The publication also states that the Dade County Board of Public Instruction will issue a detailed specification of acceptable carpet materials and construction for the purpose of bidding, purchase and installation. (RK)

ED031898

**SCHOOL CONSTRUCTION RESEARCH REPORT #9  
SEMINAR TO DISCUSS THE REPORT ON CARPET  
FUNCTION AND SELECTION**

**FOR  
THE DADE COUNTY BOARD OF PUBLIC INSTRUCTION**

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION**

**THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE  
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION  
POSITION OR POLICY.**

**BY**

**PANCOAST, FERENDINO, GRAFTON & SKEELS  
ARCHITECTS**

EF 003 137

**PURPOSE:** TO DISCUSS THE REPORT AND THE CONCLUSIONS COME TO THEREIN AND FUTURE COURSE ADVISABLE FOR COMPETITIVE BIDDING AND LOCAL FIELD TESTING.

**LOCATION:** OFFICES OF PANCOAST, FERENDINO, GRAFTON & SKEELS, 2575 SOUTH BAYSHORE DRIVE, MIAMI

**DATE:** JUNE 5, 1964

**THOSE IN ATTENDANCE:**

**REPRESENTATIVES OF DADE COUNTY BOARD OF PUBLIC INSTRUCTION -**

MRS. LYLE ROBERTS, CHAIRMAN  
MR. C. T. MCCRIMMON, REPRESENTED BY MISS PERKINS,  
DIRECTOR OF NURSES, VICTORIA HOSPITAL

**ADMINISTRATIVE STAFF OF DADE COUNTY PUBLIC SCHOOLS -**

MR. FREDERICK H. KLINE, DIRECTOR OF OPERATIONS AND  
MAINTENANCE  
MR. ROBERT B. TURNER, JR., ASSISTANT SUPERINTENDENT,  
GENERAL EDUCATION  
MR. D. R. SNYDER, ASSISTANT SUPERINTENDENT OF PHYSICAL  
PLANT

**REPRESENTATIVES OF MIAMI-DADE JUNIOR COLLEGE -**

DR. PETER MASIKO, PRESIDENT  
MR. DONALD C. BULAT, DIRECTOR OF PLANNING AND DEVELOPMENT  
MR. GEORGE CREWS, DIRECTOR OF NEW CONSTRUCTION  
DR. GEORGE MEHALLIS, DIRECTOR OF TECHNOLOGICAL, VOCATIONAL  
AND SEMI-PROFESSIONAL STUDIES

**REPRESENTATIVE OF UNIVERSITY OF MIAMI -**

MR. ED DAVIS, PURCHASING AGENT

**REPRESENTATIVE OF STATE OF FLORIDA DEPARTMENT OF EDUCATION -**

DR. HAROLD CRAMER, SCHOOL PLANT PLANNING CONSULTANT

**REPRESENTATIVE OF DADE COUNTY DEPARTMENT OF PUBLIC WORKS -**

MR. CHARLES COTTERMAN, ARCHITECT

**REPRESENTATIVE OF SOUTH FLORIDA CHAPTER AMERICAN INSTITUTE  
OF ARCHITECTS -**

MR. JAMES FERGUSON, A.I.A. PRESIDENT

**REPRESENTATIVE OF PRESS -**

**MR. PETE MANN, THE MIAMI HERALD**

**REPRESENTATIVE OF AMERICAN INSTITUTE OF INTERIOR DESIGNERS -**

**MR. WES DUNAWAY, BOARD OF GOVERNORS AND AREA FOUR  
CHAIRMAN**

**REPRESENTATIVES OF CARPET YARN MANUFACTURERS -**

**MR. BENJAMIN GADDY, SOUTHERN REPRESENTATIVE FOR  
DUPONT CO.**

**MR. FRED J. WILLOUGHBY, DUPONT CO.**

**MR. J. FRANCIS LOUGHRAN, SENIOR MERCHANDISING SPECIALIST  
CHEMSTRAND CO.**

**REPRESENTATIVES OF CARPET MILLS -**

**MR. PETE FANCHER, JAMES LEES AND SONS CO.**

**MR. THOMAS J. IMMS, JAMES LEES AND SONS CO.**

**MR. JACK DRISCOLL, MAGEE CARPET CO.**

**MR. WALTER VANDERLIP, MAGEE CARPET CO.**

**MR. WALTER MCNAB, BIGELOW-SANFORD, INC.**

**MR. MARTIN FRISCHE, BIGELOW-SANFORD, INC.**

**REPRESENTATIVES OF DEALERS AND INSTALLERS -**

**MR. JOHN BAKER, OWNER BAKER'S CARPET CO., INC.**

**MR. EVAN BARROS, OWNER MIAMI RUG CO.**

**MR. SAM BERGMAN, OWNER ALEXANDER CARPETS CO.**

**MR. GRADEN CAUSEY, MANAGER HARRY RICH CARPET CO.**

**MR. PAT ELLIS, ALEXANDER CARPET CO.**

**MRS. GROSS, OWNER'S WIFE, JALCO CARPET CO.**

**MR. RENO HERNANDEZ, OWNER PAUL'S CARPET SERVICE**

**MR. L. R. KELLER, MANAGER FLAMINGO CARPET SERVICE**

**MR. JOE KORODIN, MANAGER MIAMI RUG CO.**

**MR. RAY LINSKEY, MANAGER ALL FLORIDA CARPET SERVICE**

**MR. EDWARD MANDELL, OWNER MANDELL CARPET CO.**

**MR. CURTIS MOODY, F. T. KELLY CO.**

**MRS. ELVA SCHWEIDA, CONTRACT CARPETS INC.**

**MR. MILTON ABRAMS, ARCHITECT, CONNELL, PIERCE,  
GARLAND & FRIEDMAN**

**REPRESENTATIVES OF PANCOAST, FERENDINO, GRAFTON & SKEELS -  
ARCHITECTS AND ENGINEERS, ARCHITECTS TO THE DADE COUNTY  
BOARD OF PUBLIC INSTRUCTION -**

**MR. RUSSELL T. PANCOAST, F.A.I.A.**

**MR. ANDREW J. FERENDINO, A.I.A.**

**MR. EDWARD G. GRAFTON, A.I.A.**

**MR. NORMAN A. SKEELS, A.I.A.**

**MR. LESTER PANCOAST, A.I.A.**

**REPRESENTATIVES OF PANCOAST, FERENDINO, GRAFTON & SKEELS -  
(CONTINUED)**

**MR. PINSON WHIDDON, A.I.A.**

**MR. JAMES CHURCH**

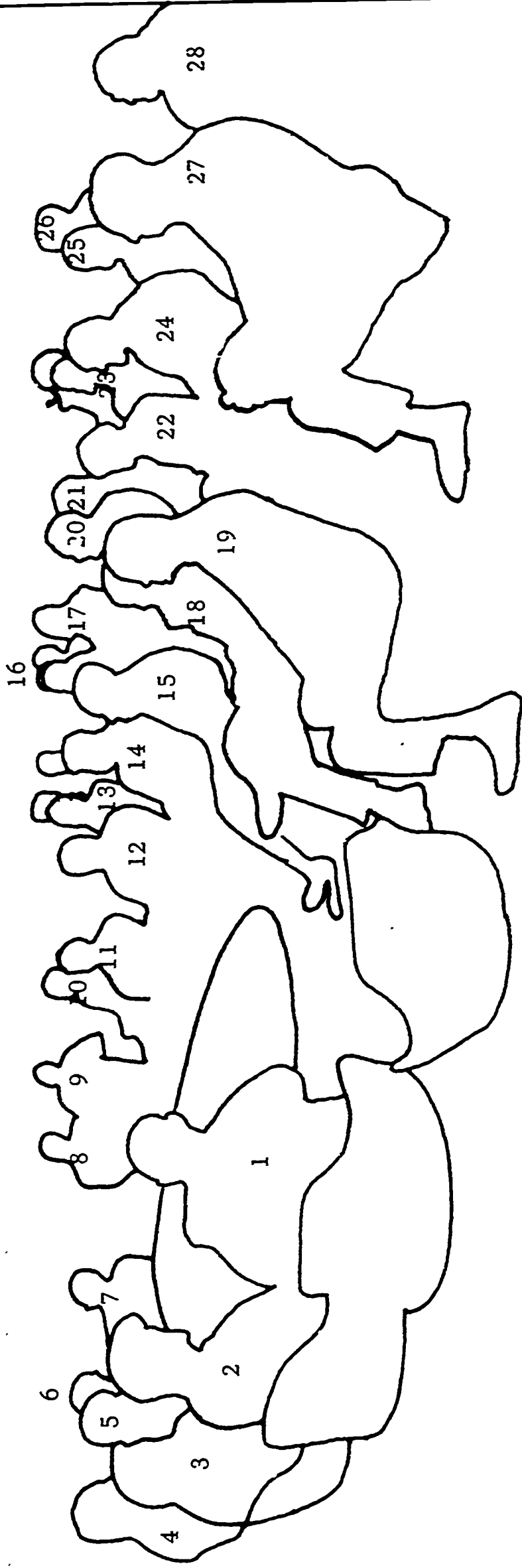
**MR. EDWARD T. THOMPSON, JR.**

**MR. HILARIO CANDELA**

**MR. FRANCIS TARLOWSKI**

**MR. PETER SPILLIS**

- |   |   |   |  |
|---|---|---|--|
| 1. MR. MARTIN FRISCHE,<br>BIGELOW SANFORD INC.                  | 8. MR. D. R. SNYDER, ASSIST.<br>SUPER. PHYSICAL PLANT | 15. MR. CURTIS MOODY,<br>F. T. KELLY CO.      | 22. MRS. GROSS,<br>JALCO CARPET CO.        |
| 2. MRS. ELVA SCHWEIDA,<br>CONTRACT CARPETS INC.                 | 9. MR. DONALD BULAT, PLANNING<br>DADE JUNIOR COLLEGE  | 16. MR. RAY LINSKY,<br>FLA. CARPET SERVICE    | 23. MR. EVANS BARROS,<br>MIAMI RUG CO.     |
| 3. MR. J. FRANCIS LOUGHRAN,<br>CHEMSTRAND CO.                   | 10. MR. HILARIO CANDELA<br>ARCHITECT                  | 17. MR. L. R. KELLER,<br>FLAMINGO SERVICE     | 24. MR. PETE MANN<br>MIAMI HERALD          |
| 4. MR. BENJAMIN GADDY,<br>DUPONT CO.                            | 11. MR. HAROLD CRAMER, FLA.<br>DEPT. OF EDUCATION     | 18. MR. JACK DRISCOLL,<br>MAGEE CARPET CO.    | 25. MR. TOM IMMS<br>JAMES LEES & SONS      |
| 5. MR. FRED KLINE, DIRECTOR OF<br>MAINTENANCE DADE SCHOOLS      | 12. MR. JOHN BAKER, BAKER'S<br>CARPET CO.             | 19. MR. WALTER VANDERLIP,<br>MAGEE CARPET CO. | 26. MR. PETER FANCHER<br>JAMES LEES & SONS |
| 6. MR. JIM CHURCH, SCHOOL CONST.<br>RESEARCH, PANCOAST & ASSOC. | 13. MR. MILTON ABRAMS<br>ARCHITECT                    | 20. MR. GRADEN CAUSEY,<br>HARRY RICH CO.      | 27. MR. CHARLES COTTERMAN<br>ARCHITECT     |
| 7. MR. A.J. FERENDINO, ARCHITECT<br>TO DADE COUNTY B.P.I.       | 14. MR. WES DUNAWAY<br>INTERIOR DESIGNER              | 21. MR. WALTER MCNAB,<br>BIGELOW-SANFORD INC. | 28. MR. JAMES FERGUSON<br>PRES. A.I.A.     |







**WELCOME TO SEMINAR -**

MR. ANDREW J. FERENDINO WELCOMED THOSE ATTENDING THE SEMINAR ON BEHALF OF THE FIRM AND EXPRESSED HIS BELIEF IN THE IMPORTANCE OF CONSTRUCTION RESEARCH TO THE DEVELOPMENT OF THE SCHOOL CONSTRUCTION PROGRAM NECESSARY TO MEET THE NEEDS OF THE GROWING POPULATION.

**OPENING STATEMENT AND INTRODUCTION -**

MR. EDWARD G. GRAFTON SAID: "WHAT IS THE GOAL OF THE ARCHITECT REGARDING THE DESIGN OF SCHOOLS? I THINK IT IS TO CREATE THE BEST POSSIBLE ENVIRONMENT FOR THE EDUCATIONAL PROCESS. ENVIRONMENT, OF COURSE, IS MADE UP OF MANY PARTS. EACH PART AFFECTS EACH OTHER PART, AND ENVIRONMENT CAN NOT BE EVALUATED ON THE QUALITY OF EACH PART, BUT CAN ONLY BE EVALUATED ON THE QUALITY OF THE COMBINATION. I THINK ENVIRONMENT IS SPACE, CONDITION OF THE AIR, LIGHT, ACOUSTICS, COLOR AND TEXTURE. WHAT IS SPACE? CERTAINLY A CLASSROOM THAT IS TWO FEET WIDE AND SIXTY FEET LONG COULD NOT BE CONSIDERED A DESIRABLE TEACHING SPACE. CONDITION OF THE AIR HAS A LOT OF FACTORS - HOT, COLD, HUMIDITY, CLEANNESS, MOVEMENT AND ODORS. LIGHT MUST BE GLARE FREE, HAVE THE PROPER DISTRIBUTION AND INTENSITY. ACOUSTICS IS CONCERNED NOT ONLY WITH THE QUALITY OF SOUND WITHIN THE SPACE, BUT ALSO THE EFFECTS OF EXTERNAL SOUND. CERTAINLY A SCHOOL NEAR AN AIRPORT SHOULD GET SPECIAL ACOUSTICAL ATTENTION. COLOR AND TEXTURE ARE VERY IMPORTANT AND ARE WORTHY OF RECEIVING OUR MOST DELIBERATE ATTENTION. TEXTURE WILL RECEIVE MORE ATTENTION IN THE FUTURE; THERE IS A GREAT RANGE OF NEW MATERIALS WHICH PRESENT PLEASING TEXTURES. PLASTIC LAMINATES WITH SUEDE FINISHES, VINYLs, AND CARPET.

WE ARE GOING TO TALK ABOUT CARPET TODAY. THE MEMBERS OF OUR PANEL ARE AS FOLLOWS:

MR. FRED KLINE - DIRECTOR OF OPERATIONS AND MAINTENANCE,  
DADE COUNTY BOARD OF PUBLIC INSTRUCTION

MR. BENJAMIN GADDY - DUPONT CO., SOUTHERN REPRESENTATIVE

MR. J. FRANCIS LOUGHRAN, CHEMSTAND CO., SENIOR  
MERCHANDISING SPECIALIST

MRS. ELVA SCHWEIDA - CONTRACT CARPETS, INC.

MR. MARTIN FRISCHE - BIGELOW SANFORD, INC.

MR. JAMES CHURCH - DIRECTOR OF SCHOOL CONSTRUCTION  
RESEARCH, PANCOAST, FERENDINO, GRAFTON & SKEELS



## REPORT OF DISCUSSIONS -

MR. CHURCH BEGAN THE DISCUSSION BY ACKNOWLEDGING THE GENEROUS ASSISTANCE FROM YARN SUPPLIERS, CARPET MANUFACTURERS' INSTITUTE, MANUFACTURERS AND THEIR REPRESENTATIVES, DISTRIBUTORS, DADE COUNTY DEALERS AND INSTALLATION COMPANIES, AND THE MAINTENANCE DEPARTMENT OF THE DADE COUNTY SCHOOL SYSTEM IN THE PREPARATION OF THE REPORT ON THE USE OF CARPET IN SCHOOLS. SOME OF THE TECHNICAL MATERIAL CONTAINED IN THE REPORT WAS TAKEN FROM A BROCHURE BY THE HOTEL ASSOCIATION AS AN UNBIASED SOURCE. IT IS POSSIBLE THAT MUCH OF THIS INFORMATION, PARTICULARLY REGARDING SYNTHETIC CARPET FIBERS, IS OUTDATED. THE HOPE WAS EXPRESSED THAT THIS SEMINAR MIGHT REVIEW AND STRENGTHEN THE REPORT IN THIS AREA.

ADDITIONAL MATERIAL HAS BEEN RECEIVED SINCE THE REPORT WENT TO PRESS, BUT MOST OF THIS SUBSTANTIATES RATHER THAN CONTRADICTS THE FACTS AND CONCLUSIONS IN THE REPORT. SINCE THE OBJECTIVE WAS TO SUMMARIZE THE INFORMATION AVAILABLE FOR THE CONVENIENCE OF THOSE NOT HAVING TIME TO READ EVERYTHING AVAILABLE, SOME THINGS HAVE OF NECESSITY BEEN OMITTED.

THE REPORT DIVIDES INTO THREE MAIN DISCUSSIONS: FIRST, THE BENEFITS GAINED BY USING CARPET INSTEAD OF OTHER FLOOR FINISHES; SECOND, THE TOTAL USE COST COMPARED TO ASPHALT TILE WHEN MAINTENANCE FOR EQUAL APPEARANCE LEVEL IS TAKEN INTO CONSIDERATION AS PART OF THE COST, AND THIRD, THE SELECTION OF CONSTRUCTION AND FIBER TO BE USED.

THE FIRST PORTION LAYS MUCH STRESS ON CARPETS' EFFICIENCY FOR THE CONTROL OF SOUND BOTH BY SOUND ABSORPTION AND THE DEADENING OF IMPACT NOISE AT THE SOURCE. IT WAS NOTED THAT A SYMPOSIUM IN APRIL ON CARPET IN SOUND CONTROL ATTENDED BY SOUND ENGINEERS RECOMMENDED THAT ADDITIONAL TESTS BE MADE TO ASSIGN DEFINITE COEFFICIENTS TO CLASSIFICATIONS OF CARPET CONSTRUCTION. THIS IS TO GUIDE ENGINEERS AND ARCHITECTS IN THE SELECTION AND SPECIFICATION OF CARPET FOR SOUND ABSORPTION AS THEY ARE GUIDED BY THE COEFFICIENTS PUBLISHED BY MANUFACTURERS OF OTHER ACOUSTICAL MATERIALS SUCH AS TILE AND PLASTER.

IN THE COURSE OF DISCUSSING SOUND ABSORPTION OF CARPET, THE FACT WAS BROUGHT OUT THAT NO COEFFICIENTS ARE AVAILABLE FOR U. S. ROYAL VINYL CARPET. SINCE SOUND ENERGY IS DISSIPATED BY THE AIR SPACES BETWEEN FIBERS OF CARPET AND THE SPACES BETWEEN

THE TUFTS OF VINYL ARE FEWER, IT MUST BE ASSUMED THAT IT WOULD HAVE A LOWER COEFFICIENT OF SOUND ABSORPTION. THE CONTRIBUTION OF UNDERLAY OR PAD HAS BEEN MEASURED FOR CONVENTIONAL WOVEN CARPETS AND FOUND TO BE A CONSIDERABLE PORTION OF THE TOTAL VALUE IN TERMS OF ABSORPTION COEFFICIENT. HOW EFFECTIVE THE PAD MIGHT PROVE IN ACTUAL TESTS IN THE CASE OF VINYL CARPET, WHERE A CONTINUOUS SHEET PREVENTS AIR BORNE SOUND ENERGY FROM PENETRATING TO THE PAD, IS OPEN TO QUESTION. EVEN LATEX APPLIED TO THE BACK OF WOVEN CARPET, WHILE IT INCREASES EFFICIENCY AT LOW FREQUENCIES, TENDS TO DECREASE HIGH FREQUENCY EFFICIENCY AND REDUCES THE OVERALL NOISE REDUCTION COEFFICIENT.

THE IMPROVEMENT OF THE BEHAVIOR OF STUDENTS, RESULTING FROM THE PLACING OF CARPET IN SCHOOLS. WAS NOTED AND COMMENT MADE THAT WE KNOW THAT SIMILAR EFFECTS WILL BE EXPERIENCED LOCALLY. THE REDUCTION OF TENSION IN TEACHERS STRAINING TO BE HEARD OVER DISTRACTING NOISE WILL RESULT IN INCREASED EFFICIENCY IN BETTER EDUCATIONAL ENVIRONMENT.

COMPARISONS WERE MADE BETWEEN THE SCHOOL WHERE RECORDS WERE ACCURATELY KEPT OF MAINTENANCE IN BOTH RESILIENT FLOOR AND CARPET AREAS COVERED BY THE REPORT AND LOCAL CONDITIONS. EITHER OUR CONDITIONS OF SOILING ARE WORSE OR THE SHAKER JUNIOR HIGH DID NOT MAINTAIN AS HIGH A LEVEL OF APPEARANCE. OUR MAINTENANCE ADMINISTRATION SCHEDULES FOUR STRIP AND RESEAL OPERATIONS INSTEAD OF TWO PER YEAR IN THE REPORTED SCHOOL, AND SOME CUSTODIANS FIND IT NECESSARY TO INCREASE THIS SCHEDULE TO MAINTAIN CONDITIONS SATISFACTORY UNDER INDIVIDUAL CIRCUMSTANCES. THE SIGNIFICANT THING ABOUT THIS IS THAT THE LARGE SCALE SURVEY BY INDUSTRIAL SANITATION COUNSELORS SHOWED THAT THE WORSE THE SOIL CONDITION, THE GREATER THE SAVINGS IN MAINTENANCE OF CARPET OVER RESILIENT FLOORING. WHETHER THESE SAVINGS WILL ACTUALLY SHOW ON THE BALANCE SHEET, OR WHETHER THEY WILL BE REFLECTED IN BETTER ATTENTION TO OTHER AREAS OF MAINTENANCE REMAINS TO BE SEEN IN ACTUAL PRACTICE.

WHEN CONSIDERING THE DETAILED RECOMMENDATIONS FOR CARPET SPECIFICATIONS, THE POINT WAS MADE THAT ASIDE FROM SOUND ABSORPTION A LOWER PILE HEIGHT WOULD BE SATISFACTORY FOR NYLON PILE FROM THAT REQUIRED FOR WOOL BECAUSE OF SUPERIOR RESISTANCE TO ABRASION AND STILL ACHIEVE THE SAME WEAR LIFE. THE IMPORTANT FACTOR TO MAINTAIN IS PILE DENSITY SO THAT PILE FIBERS SUPPORT ONE ANOTHER AND RESIST MATTING BETTER.

THE QUESTION WAS RAISED AS TO HOW THE CHOICE WAS MADE OF FLAT SPONGE RUBBER CARPET UNDERPAD. AFTER CONSIDERABLE DISCUSSION, IT WAS CONCEDED THAT WAFFLE TYPE WAS TOO SOFT AND CAUSES FATIGUE AND LACKS THE DURABILITY FOR THIS TYPE OF INSTALLATION.

THE SUGGESTION MADE THAT ALL HAIR FELT WOULD HAVE SUPERIOR BREATHING QUALITIES TO DISSIPATE MOISTURE FROM BELOW HAS MERIT. COST INFLUENCED THE SELECTION MADE AND SEEMS A BETTER ANSWER THAN COMBINATIONS OF HAIR AND JUTE OF COMPARABLE COST WHICH MATS DOWN WITH USE.

THE DISCUSSION OF THE PROBLEM OF MOISTURE LED TO THE SUGGESTION THAT PERHAPS A SOLUTION TO THE PROBLEM IN THE CASE OF JUTE AND KRAFTCORD STUFFER AND COTTON CHAIN USED IN BACKING MIGHT BE FOUND IN THE USE OF SYNTHETIC SUBSTITUTES ALREADY BEING EXPERIMENTED WITH AND USED FOR AIRCRAFT CARPET CURRENTLY. THESE MATERIALS DO NOT ABSORB MOISTURE OR SOIL AS MUCH AND ARE MORE DIMENSIONALLY STABLE. THE DESIRABLE FEATURES WERE GENERALLY ADMITTED IN THE EVENT OF WATER DAMAGE FROM STORMS. THE CARPET MANUFACTURERS' REPRESENTATIVES POINTED OUT THAT, EXCEPT FOR SPECIAL CASES LIKE AIRCRAFT, THE CURRENT COST OF SYNTHETIC BACKING MATERIALS SEEMS TO RULE OUT THEIR USE IN BUILDINGS AT PRESENT.

IN THE COURSE OF THIS SAME DISCUSSION REGARDING THE PROBLEM OF MOISTURE FROM BELOW THE SLAB, IT WAS STATED THAT IN ONE INSTANCE IT WAS NECESSARY TO PUNCTURE THE CONTINUOUS SHEET FORMED BY VINYL CARPET TO RELEASE MOISTURE VAPOR.

THE MATTER OF PUBLIC CRITICISM OF THE SCHOOL SYSTEM FOR THE USE OF CARPET BECAUSE OF THE LUXURY IMAGE WAS DISCUSSED AT SOME LENGTH, AND THE EXAMPLE CITED OF I.B.M. CURTAILING THE USE OF CARPET EVEN THOUGH IT PROVIDED SUPERIOR ACOUSTIC TREATMENT AND REDUCED MAINTENANCE IN GENERAL OFFICE AREAS IN ORDER TO AVOID A "FAT CAT" CORPORATE IMAGE. FINALLY, IT WAS CONCEDED THAT THE PRECEDENT OF THE INTRODUCTION OF AIR CONDITIONING WITHOUT THE OCCURANCE OF A PUBLIC OUTCRY, SUCH AS HAS OCCURRED IN SOME SCHOOL DISTRICTS, IS SUFFICIENT EVIDENCE THAT AN INFORMED PUBLIC WILL ACCEPT CHANGES WHICH PROVIDE IMPROVED EDUCATIONAL ENVIRONMENT.

LOCAL TESTS OF VARIOUS CONSTRUCTIONS AND FIBERS TO GAIN CRITERIA FOR SELECTION IN FUTURE USE OF CARPET IS ALREADY UNDER CONSIDERATION. THE MEETING WAS ASKED FOR RECOMMENDATIONS ON HOW THESE SHOULD BE CONDUCTED. IT WAS AGREED THAT UNLESS CAREFULLY DOCUMENTED THEY WOULD ADD LITTLE EXCEPT EXPERIENCE WITH LOCAL SOILING CONDITIONS TO WHAT IS ALREADY KNOWN. THE VALUE OF PUBLIC EDUCATION TO THE USE OF CARPET THROUGH THIS MEANS MUST NOT BE OVERLOOKED. SOME FELT THAT IN ORDER THAT ALL CONDITIONS OF SOIL BE PARALLEL, AN ENTIRE SCHOOL SHOULD BE CARPETED IN EACH FIBER RATHER THAN PARTS OF ONE SCHOOL.

SOME CRITICISM OF THE USE OF A UNIFORM SPECIFICATION FOR ALL AREAS IN A SCHOOL WAS EXPRESSED. THE COUNTER SUGGESTION WAS THAT LESS EXPENSIVE CONSTRUCTION MIGHT BE SUBSTITUTED IN AREAS OF LIGHTER TRAFFIC. THE SUGGESTION WAS REJECTED BY THE MAJORITY AS IMPRACTICAL UNLESS SUFFICIENT YARDAGE WAS INVOLVED IN EACH USE CLASSIFICATION BECAUSE OF MINIMUM YARDAGE REQUIREMENT FOR THE MILLS TO SET UP THE LOOMS FOR EACH TYPE OF SPECIFICATION. THE VARIATION WOULD ALSO COMPLICATE SPECIFICATION WRITING BY ARCHITECTS, BIDDING BY DEALERS, AND FUTURE PATCHING BY OWNER, INVOLVING COSTS GREATER THAN THE SAVINGS TO BE REALIZED.

EXCEPTION WAS TAKEN TO THE REPORT'S POSITION ON CEMENTED CARPET INSTALLATION. A MINORITY CONTENDED THAT IT WAS A SATISFACTORY TECHNIQUE PROVIDED THE PROPER ADHESIVE WAS USED AND MEASURES TAKEN TO NEUTRALIZE THE EFFECTS OF CEMENT CURING AGENTS EMPLOYED ON THE CONCRETE SLAB. THE OBJECTION VOICED THAT THE CEMENTED CARPET WAS EXCESSIVELY DIFFICULT TO REPLACE MIGHT BE ANSWERED BY THE USE OF A TEAR SHEET MENTIONED IN THE REPORT. THE TENDENCY FOR SEAMS OF CEMENTED CARPET TO GAP WITH LATER SHRINKAGE IS HARDER TO ANSWER.

AFTER LUNCHEON MR. FERENDINO SERVED AS MODERATOR AND THE NATIONAL REPRESENTATIVES OF THE SYNTHETIC FIBER MANUFACTURERS PRESENT WERE CALLED UPON TO STATE THE CASE FOR THEIR PRODUCTS. MR. BENJAMIN GADDY, SOUTHERN REPRESENTATIVE FOR DUPONT CO., SPOKE FIRST. HE TOLD THE MEETING THAT STREAKING EFFECT DESCRIBED IN THE REPORT AS OCCURRING IN NYLON VELVET TWEEDS OF DIFFERENT COLORED YARNS WAS NO LONGER A PROBLEM WITH THE USE OF YARN DYED DIFFERENT COLORS IN THE SAME STRAND BY ALTERING THE CHEMISTRY OF THE PRODUCT SO THAT IT ACCEPTS THE DYE DIFFERENTLY. THE FACTOR OF NYLON CARPET SHOWING SOIL HAS BEEN REDUCED BY REDUCING LUSTER BY THE ALTERATION OF THE PROFILE OF THE NYLON FIBER FROM ROUND TO TRILOBAL SECTION TO BREAK UP LIGHT REFLECTION. HIS CONTENTION IS THAT COLOR IS THE PRIME FACTOR IN SHOWING SOIL, AND ITS CAREFUL SELECTION WILL MAKE MORE DIFFERENCE THAN THE CHOICE OF FIBER IN THE RATE OF SOILING. HE ALSO TOOK ISSUE WITH THE REPORT REGARDING RESILIENCE, SAYING THAT THE RESILIENCE OF NYLON HAD BEEN GREATLY UNDERRATED. CONSTRUCTION MAY HAVE BEEN RESPONSIBLE FOR EXCESSIVE MATTING TENDENCY OBSERVED IN NYLON, BECAUSE SUPERIOR ABRASION RESISTANCE HAS TEMPTED FABRICATOR TO EMPLOY LESS DENSE CONSTRUCTION FOR EQUAL DURABILITY. THE RESULT IS LESS SUPPORT FROM ADJOINING FIBERS OF THE INDIVIDUAL CARPET YARN FIBER AND CONSEQUENT GREATER TENDENCY TO MATTING. MR. GADDY SUGGESTED THAT THE MOST CARPET PER DOLLAR MIGHT BE OBTAINED BY THE USE OF TUFTED CONSTRUCTION BECAUSE OF THE GREATER SPEED OF MANUFACTURE. NEW TUFTING MACHINES ARE CAPABLE OF ADEQUATE DENSITIES OF 64 TUFTS PER SQUARE INCH AND



DOUBLE LATEX SIZING WITH DOUBLE BACKING ACHIEVE TUFT BIND EQUAL TO WOVEN CARPET WAS HIS CLAIM. THE CLINCHER OF HIS CASE FOR SYNTHETIC PILE FIBER WAS A RECENT REDUCTION OF 20% FOR THE RAW YARN WHICH SHOULD BE REFLECTED IN SOMETHING LIKE 7% REDUCTION IN THE COST OF THE FINISHED PRODUCT. SINCE THE SEMINAR, ADDITIONAL REDUCTIONS HAVE BEEN MADE BY NYLON YARN SUPPLIERS. THIS SORT OF CHANGE IN RELATIVE COSTS OF BASIC CARPET MATERIALS WAS ANTICIPATED AS A DETERMINING FACTOR IN SELECTION IN THE ORIGINAL REPORT.

MR. J. FRANCIS LOUGHRAN, SENIOR MERCHANDISING SPECIALIST FOR CHEMSTRAND DIVISION OF MONSANTO, SPOKE ON BEHALF OF SYNTHETICS GENERALLY SINCE THEY, LIKE OTHER CHEMICAL FIRMS, PRODUCE NYLON FIBER AS WELL AS THEIR WIDELY ADVERTIZED ACRYLIC FIBER "ACRILAN". HE STATED THAT THE FIGURE FOR THE PERCENTAGE OF THE FIELD OCCUPIED BY WOOL HAS ALTERED SHARPLY IN RECENT MONTHS. ALSO THAT THE PERCENTAGE VARIES CONSIDERABLY DEPENDING ON WHAT AREA OF USE IS UNDER CONSIDERATION. AT ANY RATE, THE PERCENTAGE OF THE TOTAL MARKET ACCORDING TO THE LATEST INFORMATION AVAILABLE, THAT OF 1963, GIVES WOOL 47% RATHER THAN 80% REPORTED FROM EARLIER STATISTICS. THE REMAINDER IS SHARED BY THE SYNTHETICS AND ALL OTHER NATURAL FIBERS. THIS PERCENTAGE WILL CONTINUE TO SHIFT AT THE EXPENSE OF WOOL IF THE PRICE INCREASES AGAIN, THE SUPPLY OF SYNTHETICS INCREASES WITH NEW FACILITIES COMING INTO PRODUCTION, AND PRICE REDUCTIONS OF SYNTHETICS LIKE THAT JUST ANNOUNCED FOR NYLON CONTINUE TO OCCUR.

ON THE SUBJECT OF FLAMMABILITY REFERRED TO IN THE REPORT, HE MADE THE FOLLOWING POINTS: FIRST, THAT ACRYLICS WILL MELT BEFORE THEY BURN AND ARE SELF-EXTINGUISHING ONCE THE SOURCE OF HEAT IS REMOVED. SECOND, THE VERY LOCATION OF CARPET ON THE FLOOR, UNLIKE DRAPERIES, PREVENTS PROPOGATION BECAUSE THE FLAME CANNOT GET UNDER TO IGNITE, AND THE AIR COMING IN TO FEED OXYGEN TO THE FIRE COOLS THE CARPET BELOW FLAME POINT. THIRD, ACRILAN IS ACCEPTED BY GOVERNMENT SPECIFICATIONS FOR CONSTRUCTION OF FEDERAL BUILDINGS. FOURTH, THE PRODUCT IS ACCEPTED BY BOSTON WHICH HAS SOME OF THE MOST RIGID TESTS BECAUSE OF THE NIGHT CLUB DISASTER THERE.

AS REGARDS WEARING QUALITY OF ACRILAN EITHER BY ABRASION TESTS OR ACCELERATED USE SIMULATED AT THE DECATUR, GEORGIA, PLANT CHEMSTRAND FOUND IT SUPERIOR TO WOOL. CARPET MANUFACTURER'S REPRESENTATIVES AT THE MEETING SAID IT WAS AT LEAST THE EQUAL OF WOOL ACCORDING TO THEIR OWN TESTS AND COULD BE USED IN THE SAME CONSTRUCTIONS.

THE DISCUSSION RETURNED TO THE RELATIVE MERITS OF COMMENTING CARPET IN PLACE WITH A VOCAL ELEMENT IN FAVOR OF THIS METHOD PROVIDED THE PROPER ADHESIVE IS EMPLOYED, AND ANOTHER FACTION IN FAVOR OF TACKLESS STRIP FASTENING. THE NECESSITY FOR RESTRETCH ON LARGE AREAS WAS DEBATED WITH SOME PRESENT EXPRESSING THE OPINION IT WOULD NOT BE NECESSARY WITH GOOD CARPET CONSTRUCTION AND ORIGINAL INSTALLATION PROPERLY CARRIED OUT.

THE EFFECT OF WICKING OF STAINS FROM THE BACKING AFTER THE STAIN HAS BEEN REMOVED FROM THE PILE FIBER WAS DESCRIBED IN REFERENCE TO THE DESIRABILITY OF SYNTHETIC BACKING MATERIALS WITH THEIR LOWER MOISTURE ABSORPTION WHICH WOULD REDUCE THIS TENDENCY TO HOLD STAIN.

THE WISDOM OF OPENING THE SPECIFICATION TO INCLUDE TUFTED CARPET CONSTRUCTION AS SUGGESTED BY MR. GADDY OF DUPONT CO. WAS QUESTIONED. HE SAID THAT DUPONT IN THEIR OWN BUILDINGS HAD FOUND IT SATISFACTORY FOR COMMERCIAL USE WHEN DENSE CONSTRUCTION OF SIXTY FOUR TUFTS TO THE SQUARE INCH ARE ACCOMPANIED BY A DOUBLE COATING OF LATEX, THE FIRST TO LOCK THE TUFTS, THE SECOND TO BIND THE REINFORCED BACKING. LOCAL DEALERS AND APPLICATORS PRESENT EXPRESSED DOUBT REGARDING THE USE OF THIS CONSTRUCTION BECAUSE OF DIMENSIONAL INSTABILITY INHERENT IN THIS TYPE OF CONSTRUCTION.

THE SEMINAR CONCLUDED WITH A GENERAL EXPRESSION OF GRATITUDE ON THE PART OF THOSE PRESENT FOR AN OPPORTUNITY TO EXCHANGE KNOWLEDGE AND EXPERIENCE IN THE FIELD OF CARPET MANUFACTURE, INSTALLATION AND MAINTENANCE.

#### SUMMATION OF SEMINAR:

THE SENSE OF THE MEETING IS BRIEFLY STATED AS FOLLOWS:

1. THE USE OF CARPET IN SCHOOLS OFFERS SUBSTANTIAL IMPROVEMENT IN THE EDUCATIONAL ENVIRONMENT FOR STUDENTS AND TEACHERS.
2. CARPET IS NO MORE EXPENSIVE THAN RESILIENT FLOOR FINISHES WHEN THE TOTAL USE COST IS ACCURATELY EVALUATED, TAKING MAINTENANCE INTO CONSIDERATION.
3. A DETAILED SPECIFICATION OF ACCEPTABLE CARPET MATERIALS, CONSTRUCTION, AND INSTALLATION SHALL BE ISSUED BY THE DADE COUNTY BOARD OF PUBLIC INSTRUCTION FOR THE PURPOSE OF COMPETITIVE BIDDING AND EVENTUAL PURCHASE AND INSTALLATION OF CARPET.



LEFT TO RIGHT:

MR. MARTIN FRISCHE, CONTRACT SPECIALIST, BIGELOW-SANFORD, INC.

MRS. ELVA SCHWEIDA, CONTRACT CARPETS, INC.

MR. JACK DRISCOLL, COMMERCIAL CARPET SALES MANAGER, MAGEE CARPET CO.

MR. HAROLD GRAMER, SCHOOL PLANT PLANNING CONSULTANT, FLORIDA DEPARTMENT OF EDUCATION

MR. EDWARD GRAFTON, PARTNER, PANCOAST, FERENDINO, GRAFTON & SKEELS, ARCHITECTS

MRS. LYLE ROBERTS, CHAIRMAN, DADE COUNTY BOARD OF PUBLIC INSTRUCTION





LEFT TO RIGHT:

MR. ED DAVIS, PURCHASING AGENT, UNIVERSITY OF MIAMI

MR. A. J. FERENDINO, ARCHITECT TO THE DADE COUNTY SCHOOL BOARD, PARTNER, PANCOAST, FERENDINO, GRAFTON & SKEELS, ARCHITECTS

MR. DONALD C. BULAT, DIRECTOR OF PLANNING AND DEVELOPMENT, MIAMI-DADE JUNIOR COLLEGE

MR. J. FRANCIS LOUGHRAN, SENIOR MERCHANDIZING SPECIALIST, CHEMSTAND CO.

MR. BENJAMIN GADDY, SOUTHERN REPRESENTATIVE FOR DUPONT CO.



LEFT TO RIGHT:

MR. WALTER MCNAB, CONTRACT SPECIALIST, BEGELOW-SANFORD INC.

MR. JAMES CHURCH, DIRECTOR OF SCHOOL CONSTRUCTION RESEARCH, PANCOAST, FERENDINO, GRAFTON & SKEELS, ARCHITECTS

MR. EVAN BARROS, OWNER, MIAMI RUG CO.

MR. PETE FANCHER, ASSISTANT CONTRACT MANAGER, JAMES LEES & SONS CO.